Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-9. (Canceled)

10. (Original) A method of generating a reproducible ligand profile for a given cell type, which cell type comprises a selected type of multi-ligand binding receptor, the method comprising:

(a) providing a first sample of the given cell type, wherein the first sample comprises a first plurality of polypeptide ligands bound to the selected type of multi-ligand binding receptor;

(b) isolating the selected type of multi-ligand binding receptor from the first sample;

(c) separating the first plurality of ligands from the selected type of multi-ligand binding receptor;

(d) fractionating the first plurality of ligands;

(e) generating a first profile distinguishing among the first plurality of ligands on the basis of at least one chemical or physical attribute;

(f) providing a second sample of the given cell type, the second sample being essentially identical to the first sample, wherein the second sample comprises a second plurality of polypeptide ligands bound to the selected type of multi-ligand binding receptor;

(g) isolating the selected type of multi-ligand binding receptor from the second sample;

(h) separating the second plurality of ligands from the selected type of multi-ligand binding receptor;

(i) fractionating the second plurality of ligands;

(j) generating a second profile distinguishing among the second plurality of ligands on the basis of the at least one chemical or physical attribute; and

(k) confirming that the first profile and the second profile are essentially identical, and together represent a reproducible ligand profile for the given cell type.

11. (Original) The method of claim 10, wherein a second chemical or physical attribute of each ligand is determined subsequent to the fractionation steps, and is represented in the profiles.

12. (Original) The method of claim 11, wherein a third chemical or physical attribute of each ligand is determined subsequent to the fractionation steps, and is represented in the profiles.

13. (Original) The method of claim 10, wherein the isolating and separating steps are accomplished using appropriate columns arranged in an in-line system.

14. (Original) A method of generating a ligand profile for a given type of cell, comprising:

(a) providing a sample of lysate of the given type of cell, wherein the sample comprises a first plurality of polypeptide ligands bound to a first type of multi-ligand binding receptor and a second plurality of polypeptide ligands bound to a second type of multi-ligand binding receptor;

(b) isolating the first and second types of multi-ligand binding receptors from the sample;

(c) separating the first plurality of ligands from the first type of multi-ligand binding receptor and the second plurality of ligands from the second type of multi-ligand binding receptor;

(d) fractionating the first plurality of ligands and the second plurality of ligands; and

(e) generating a first profile distinguishing among the first plurality of ligands on the basis of at least one chemical or physical attribute and a second profile distinguishing among the second plurality of ligands on the basis of the same at least one chemical or physical attribute.

15-16. (Canceled)

17. (Original) A method of comparing a first cell sample to a reference cell sample, comprising:

(a) producing a first ligand profile by a method comprising:

(i) providing a first cell sample comprising a given type of multi-ligand binding receptor bound to a first set of polypeptide ligands;

(ii) isolating the given type of multi-ligand binding receptor and the first set of ligands from the first cell sample;

(iii) separating the first set of ligands from the given type of multi-ligand binding receptor;

(iv) generating a first ligand profile distinguishing among the first set of ligands on the basis of at least one chemical or physical attribute;

(b) providing a reference ligand profile representing a second set of polypeptide ligands extracted from the given type of multi-ligand binding receptor of a reference cell sample, wherein the reference ligand profile distinguishes among the second set of polypeptide ligands on the basis of the at least one chemical or physical attribute; and

(c) comparing the first ligand profile to the reference ligand profile, in order to identify differences or similarities between the first cell sample and the reference cell sample.

18. (Original) The method of claim 17, wherein the reference cell sample consists essentially of healthy cells of an animal and the first cell sample comprises cells suspected of being diseased.

19. (Original) The method of claim 17, wherein the first cell sample comprises cells cultured in the presence of a test compound, and the reference cell sample does not.

20. (Original) The method of claim 17, wherein the reference cell sample comprises cells cultured in the presence of a test compound, and the first cell sample does not.

21-42. (Canceled)